

Part No. Catalog No.	CONNECTOR					CABLE		
	Pin		Total Length mm [inch]	Barrel OD mm [inch]	Socket Size mm [inch]	Conductor Size Range	Conductor Diameter Range mm [inch]	Strip Length mm [inch]
	Diameter mm [inch]	Length mm [inch]				AAC		
2182442-4 (2-Bolt) ASBP-2-4/0-2.5	9.1 [0.360]	64 [2.5]	165 [6.5]	31 [1.22]	13 [1/2]	#2 awg Solid to 4/0 awg Standard stranded	6.4 – 13.5 [0.25 – 0.53]	48 [1 7/8]
2182442-2 (2-Bolt) ASBP-2-4/0-6		152 [6]	254 [10]					
2182442-3 (2-Bolt) ASBP-2-4/0-9		229 [9]	330 [13]					
2182442-1 (2-Bolt) ASBP-2-4/0-12		305 [12]	406 [16]					
2182445-2 (2-Bolt) ASBP-250-350-6	11.7 [0.460]	152 [6]	254 [10]	31 [1.22]	13 [1/2]	250 kcmil Compact Stranded to 350 kcmil Standard Stranded	13.2 – 17.5 [0.52 – 0.69]	48 [1 7/8]
2182445-3 (2-Bolt) ASBP-250-350-9		229 [9]	330 [13]					
2182445-1 (2-Bolt) ASBP-250-350-12		305 [12]	406 [16]					
2182485-2 (3-Bolt) ASBP-500-750-6	15.9 [0.625]	152 [6]	295 [12]	42.5 [1.67]	13 [1/2]	500 kcmil Compact Stranded to 750 kcmil Standard Stranded	18.5 – 25.4 [0.73 – 1.00]	83 [3 1/4]
2182485-3 (3-Bolt) ASBP-500-750-9		229 [9]	371 [15]					
2182485-1 (3-Bolt) ASBP-500-750-12		305 [12]	448 [18]					

Figure 1

## 1. INTRODUCTION

This instruction sheet provides installation procedures for Aluminum ShearBolt Pin connectors.



*Dimensions are in metric units [with imperial units in brackets]. Figures are for reference only and are not drawn to scale.*

To obtain information on Energy Products, visit the TE Connectivity Energy website at: <http://energy.te.com>

ShearBolt Pin Connectors are designed to be compatible with all Raychem cable accessories and insulation products. For other applications, consult the manufacturer's installation instructions for compatibility.

Different pin lengths are available upon request.

## 2. INSTALLATION PROCEDURES

### 2.1. Cable Preparation



*DO NOT use a conductor that has been previously terminated.*

1. Determine the conductor size to be installed. Ensure that the conductor end has a straight (right-angle) cut. Strip the conductor end to the dimension shown in Figure 1.
2. Using a wire brush dedicated for use on aluminum conductors, thoroughly clean the exposed surface strands. Cleaned conductor end should be installed immediately to prevent reformation of oxides on contact surface.

### 2.2. Connector Installation

1. Back out all bolts to provide clearance for the conductor in the connector barrel.



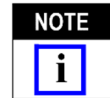
*Do not completely extract the bolts from the connector body. Removing bolts followed by improper bolt re-installation may result in stripping of the threads.*

DO NOT remove the inhibitor contained inside the connector barrel.

2. Insert conductors into the connector body. For proper installation, there should be NO GAP between the insulation and the connector body.

3. Tighten bolts in a three-step process:

- a. Hand-tighten the bolts to firmly grip aluminum conductor in place. Follow the tightening sequence shown in Figure 2.
- b. Using a wrench with a hexagonal socket, tighten the bolts one to one-and-a-half turns, (one second interval if using the TE Connectivity [cordless] impact wrench), repeating the sequence in the previous step. Bolts should remain un-sheared. Prevent core bending by using Holding Tool IT-1000-019 (or equivalent) with the wrench as shown in Figure 2.

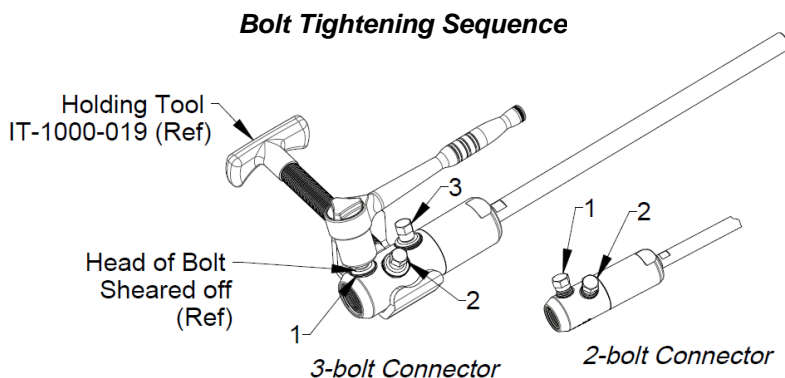


*Cordless Impact Wrench T25446-000 can be used for installation. A holding tool is not needed if using this wrench.*

- c. Repeat the sequence above, tightening each bolt until the head of bolt shears off. The wrench should remain parallel to the connector body.
4. Smoothen sharp edges of protruding bolts using the provided aluminum oxide paper or a file. Clean connector to remove particles.

## 3. REVISION SUMMARY

- Change impact Wrench.
- Remove ASBP-2-1/0-XX.
- Remove ACSR cond ref.
- ShearBolt Head A/F Dimension Change.



### Impact Wrench



Cordless Impact Wrench (T25446-000 Ref)

Figure 2